

## REMARKS

Claims 1-4 and 7-20 are pending in the above-referenced patent application. By this amendment, claims 1, 4, 7, 9, and 11-12 are amended and claims 5-6 are cancelled without prejudice or disclaimer. **In the Non-Final Office Action:** Claim 12 was rejected under 35 U.S.C. 112, second paragraph. Claims 1-3 and 13-14 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 4,616,928 to Leavitt et al. Claims 6 (now cancelled), 11, 12, 15, and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Leavitt et al. Claims 5 (now cancelled) and 17-20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Leavitt in view of U.K. Publication No. 2 054 922 to Nagel. Claims 4 and 7-10 were indicated as allowable if rewritten in independent form.

**In reply to the rejection of claim 12 under 35 U.S.C. §112, second paragraph, the Applicants respectfully request reconsideration.** Claim 12 has been amended to overcome this rejection. Accordingly, the Applicants respectfully request withdrawal of this rejection.

**In reply to the rejection of claims 1-3 and 13-14 under 35 U.S.C. §102(e) as being anticipated by Leavitt et al., the Applicants respectfully request reconsideration.** Claims 1-3 and 13-14 now recite, *inter alia*, "the light-emitter is configured for emitting light toward a smoke-sensing point that is set in an open smoke-sensing space located outside the transparent cover via the light-emitting opening."

As recited in claims 1-3 and 13-14, the smoke-sensing point is set outside the transparent cover of the smoke sensor, and accordingly, the smoke-sensing space does not need to be formed inside the smoke sensor. Since a smoke chamber does not need to be provided in the smoke sensor, the smoke sensor can be configured into a flat shape with little protrusions, and a full-flat installation, i.e., an installation without protrusions from the ceiling surface can be realized.

Leavitt et al. relates to a photoelectric smoke detector with adjustable background signal, as specified in the title. However, Leavitt et al. does not disclose this feature. Leavitt et al. states in column 3, lines 1-6 that "[a] smoke access opening 14 in the optical block 13 provides communication between the surrounding environment and a test zone 15 within the housing 12. Not shown is a conventional cover that is supported by the housing 12 and optically shields the test zone 15 from the surrounding environment." (see, lines 2 to 6 of column 3). As the test zone 15 is shielded from the surrounding environment by the conventional cover, the test zone 15 of Leavitt et al. is set "inside" of the housing 12 and covered by the conventional cover.

Accordingly, Leavitt et al. does not disclose the feature in claims 1-3 and 13-14 of "the light-emitter is configured for emitting light toward a smoke-sensing point that is set in an open smoke-sensing space located outside the transparent cover via the light-emitting opening."

At least for these reasons, claims 1-3 and 13-14 are not anticipated under 35 U.S.C. §102(e) by Leavitt et al. Accordingly, the Applicants respectfully request withdrawal of the rejection of claims 1-3 and 13-14 under 35 U.S.C. §102(e).

**In reply to the rejection of claims 11-12 under 35 U.S.C. §103(a) as being unpatentable over Leavitt et al., the Applicants respectfully request reconsideration.** Claims 11-12 are respectively amended to be dependent on claim 7 which was indicated as allowable. Claim 7 has been rewritten in independent form. Accordingly, the Applicants respectfully request withdrawal of the rejection of claims 11-12 under 35 U.S.C. §103(a).

**In reply to the rejection of claims 15-16 under 35 U.S.C. §103(a) as being unpatentable over Leavitt et al., the Applicants respectfully request reconsideration.** The features of claims 15-16 include the features discussed above. For similar reasons as discussed above, Leavitt et al. does not disclose the feature in claims 15-16 of "the light-emitter is configured for emitting light toward a smoke-sensing point that is set in an open smoke-sensing space located outside the transparent cover via the light-emitting opening."

At least for these reasons, a *prima facie* case of obviousness cannot be established under 35 U.S.C. §103(a), as Leavitt et al. does not teach or suggest, alone, all the features of claims 15-16. Accordingly, the Applicants respectfully request withdrawal of the rejection of claims 15-16 under 35 U.S.C. §103(a).

**In reply to the rejection of claims 17-20 under 35 U.S.C. §103(a) as being unpatentable over Leavitt et al. in view of Nagel, the Applicants respectfully request reconsideration.** The features of claims 17-20 include the features discussed above. For similar reasons as discussed above, Leavitt et al. does not disclose the

feature in claims 17-20 of "the light-emitter is configured for emitting light toward a smoke-sensing point that is set in an open smoke-sensing space located outside the transparent cover via the light-emitting opening."

Nagel relates to a combustion products detector, as specified in the title. However, the disclosure of Nagel does not alleviate the deficiencies of Leavitt et al. of not teaching or suggesting the feature in claims 17-20 of "the light-emitter is configured for emitting light toward a smoke-sensing point that is set in an open smoke-sensing space located outside the transparent cover via the light-emitting opening", because Nagel discloses only features related to internal circuits.

At least for these reasons, a *prima facie* case of obviousness cannot be established under 35 U.S.C. §103(a), as neither Leavitt et al. nor Nagel teach or suggest, alone or in combination, all the features of claims 17-20. Accordingly, the Applicants respectfully request withdrawal of the rejection of claims 17-20 under 35 U.S.C. §103(a).

#### **Allowable Subject Matter**

Applicants appreciate the indication that claims 4 and 7-10 contain allowable subject matter. While Applicants agree these claims are patentable over the cited references, Applicants do not agree that patentability resides in each feature exactly as expressed in the claims, nor that each feature is required for patentability of each claim.

In reply to the objection of claims 4 and 7-10, claims 4, 7, and 9 have been rewritten in independent form. Accordingly, the Applicants respectfully request withdrawal of the objection of claims 4 and 7-10.

### CONCLUSION

Applicants believe that a full and complete response has been made to the Office Action and respectfully submits that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicants respectfully submit that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "T.A. VL" followed by a long horizontal stroke.

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